Ilonka Aylward

v

City of Charlotte

and

Charlotte-Mecklenburg Stormwater Services (a.k.a. "Charlotte Stormwater Services," a.k.a. "Charlotte/Mecklenburg Storm Water," a.k.a. "Charlotte Storm Water Services," a.k.a. "City of Charlotte Storm Water Services")

and

Armstrong Glen, P.C.

and

Joseph ("Josh") H. Letourneau, P.E.

Ilonka Aylward's Complaint

Exhibit 5

Dr. ILONKA AYLWARD, ESQ, acting *pro se* 1645 Scotland Avenue, Charlotte, North Carolina 28207 704.334.5902 draylward@carolina.rr.com

March 3, 2020

Notice of Intent to Commence Civil Action under Sections 301, 401, 402, 404 & 505 of the Clean Water Act and the North Carolina Sedimentation Pollution Control Act of 1973

BY CERTIFIED MAIL

Armstrong Glen, P.C. Josh H. Letourneau,

c/o William H. Armstrong, P.E.

registered agent 97731-L Southern Pine

9731-L Southern Pine Blvd. Blvd.

Charlotte, N.C. 28273 Charlotte, N.C. 28273

Dear Armstrong Glen, P.C. and Mr. Letourneau:

As you know, I previously sent out the below *Notice of Intent Letter* in early December of 2019. At that time, I did not name you as defendants because I was led to believe that Armstrong Glen, P.C. only "consulted." As you also know, on 1/27/20, Mr. Michael Davis, the Charlotte City Engineer, speaking at the Charlotte City Council meeting, implicated you as the ultimately responsible parties.

For this reason, I am forced to add you as defendants.

Since the Fall of 2017, Charlotte Mecklenburg Stormwater Services and the City strongly guarded all access to you. My calls and emails to you in 2019 went unreturned. I do hope, however, that this letter will serve to break the ice and you will contact me to discuss the problem.

Meanwhile, this is the required 60 day notice of the lawsuit:

Dr. Ilonka Aylward, Esq., the undersigned homeowner, acting *pro se*, hereby notifies you of her intent to name the following additional defendants in the civil action against the City of Charlotte and the Charlotte-Mecklenburg Stormwater Services Utility (collectively "City&Storm") under sections 301, 401, 402, 404 and 505 of the *Clean Water Act* ("CWA"); *North Carolina Sediment Pollution Control Act of 1973, as amended*, and Charlotte Code of Ordinances. Additional defendants to be named:

Armstrong Glen, P.C., Josh H. Letourneau, P.E., (collectively "Armstrong Glen Defendants," or "Armstrong Defendants" and, together with City&Storm, "Defendants.")

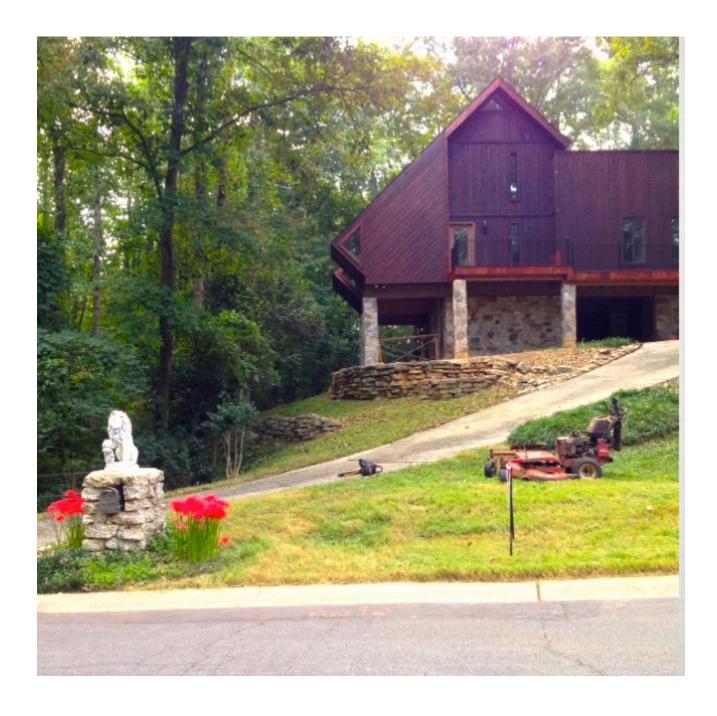
The civil suit against you will commence sixty days from the date of this letter unless you take actions described below.

In addition, I seek that Defendants pay civil penalties of \$25,000 per day for each day of each violation, as provided by 33 U.S.C. \$1319(d), as well as fines and penalties under the *Sedimentation Pollution Control Act of 1973*, and under City Code of Ordinances.

I ask that Defendants desist from unpermitted (and/or in violation of the permit) discharges of dredged and fill materials in waters of the United States and from unpermitted (and/or in violation of the permit) discharges of stormwater and pollutants to surface waters, associated with the following current and threatened but imminently forthcoming activities on a tract of land known as 2813 Hinsdale Street, Charlotte, North Carolina 28210.

The threatened and existing violations on 2813 Hinsdale Street, Charlotte, North Carolina, are incident to the Defendants' project known as "Hinsdale-Tinkerbell Stormwater Drainage Improvement Project" with the drainage area of approximately 240 acres and current estimated cost of construction \$7,900,000.

EXECUTIVE SUMMARY



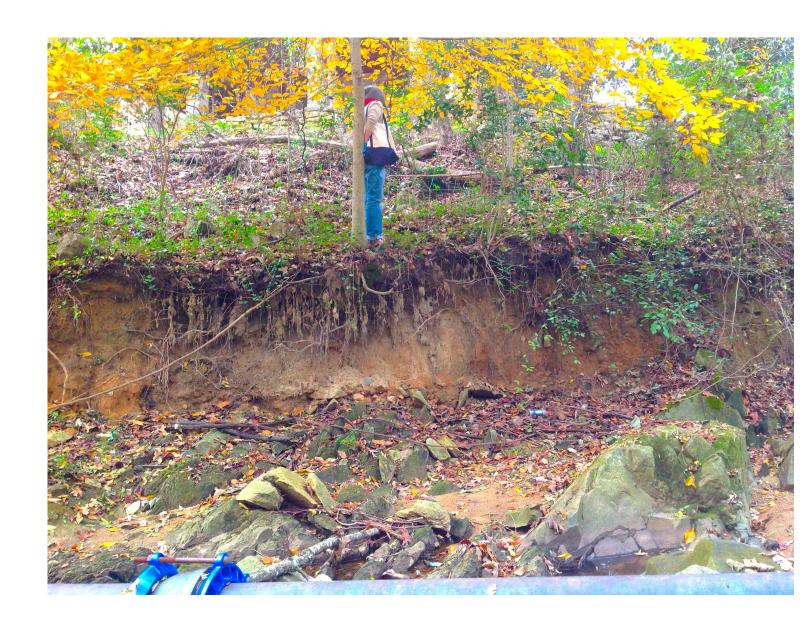
2813 Hinsdale St., Charlotte, North Carolina 28210.

My house, guarded by two retaining walls, sits on a steep slope.



The slope above the creek is very steep — up to 57 degrees effectively, — and nearly vertical in parts.

The slope is over 20 feet tall along the creek under the house.



Over decades, storm water has been shooting at my bank from an illegally designed outfall, causing erosion.



US Army Corps of Engineers:

DO NOT ANGLE STORMWATER PIPE AT 90 DEGREES TO THE RIGHT BANK! (EROSION)

On the left culvert wing wall, downstream part of Hinsdale Street culvert, there is a stormwater outfall designed faultily, and in violation of Clean Water Act: storm water hoses at right bank (where my house sits) at 90 degrees, and shoots water with such force that it undercuts the bank below.

U.S. Army Corps of Engineers warned Stormwater that existing outfall design, where stormwater shoots at 90 degrees across the creek, is faulty. Less than two hours after receiving directions from the U.S. Corps of Engineers, Charlotte-Mecklenburg Stormwater Services ("the CMSWS") secretly agreed between themselves to ignore the U.S.Corps's instruction.



The suffering slope has severe erosion, — "severe" being the official erosion grade determined by <u>Channel Stabilization</u> <u>Assessment Report</u> by *Wildlands Engineering* (hired by Defendants).

The red and yellow lines mean "severe" and "mild" erosion, respectively (look for numbers 42+00 and 43+00).

Since 2014, City of Charlotte, CMSWS and Armstrong Glen, P.C. have been working on "Hinsdale-Tinkerbell Storm Drainage Improvement Project."

The project covers 240 acres, and has a \$7,900,000 budget.



One of the project's stated goals is to "address stream erosion."

On Hinsdale Street, the illegal stormwater outfall and the entire culvert — 84-inch round pipe with flared wingwalls cutting high & deep up the slope (shown



here) will be ripped out and replaced with a 12x7 "bottomless" culvert.

Stormwater flow will be increased by redirecting large additional flow from wider areas. Defendants plans to **replicate** the outfall shooting at the opposite bank at 90 degrees.

Also, as shown with red arrows here, Defendants threaten to grade the steep slope, high and wide above and downstream of the culvert, and far downstream, beyond construction area proper, in order to...

store heavy, vibrating machinery on this steep slope over 20 feet tall.

Defendants' land-clearing plan includes:

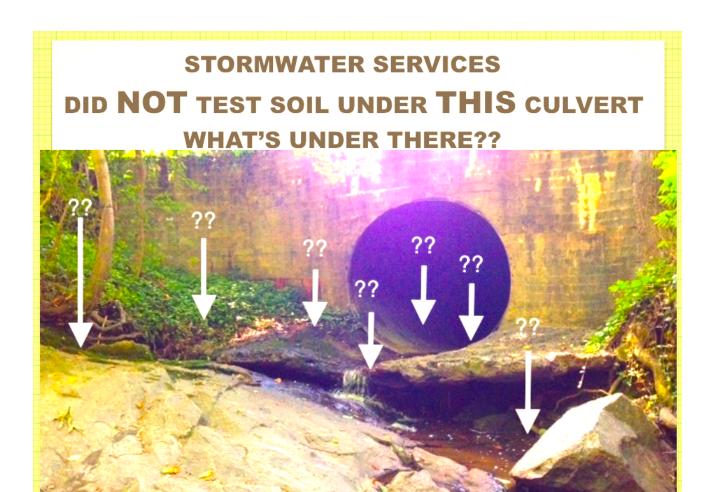
removing trees, shrubs, vegetation cover with mechanized excavation activities,

extensive grading at prohibited angles 1.5:1) and heights (almost double the 10 ft maximum) and without a buffer,

permanent change of bank contours,

destabilizing stream bank with heavy vibrating mechanized equipment and machinery,

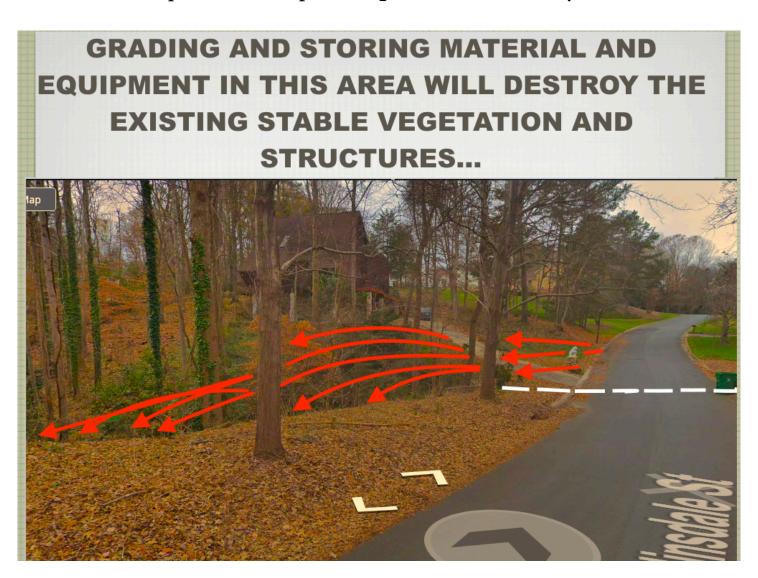
— all in violation of the Clean Water Act and Sediment Pollution Control Act of 1973 and Charlotte Code of Ordinances



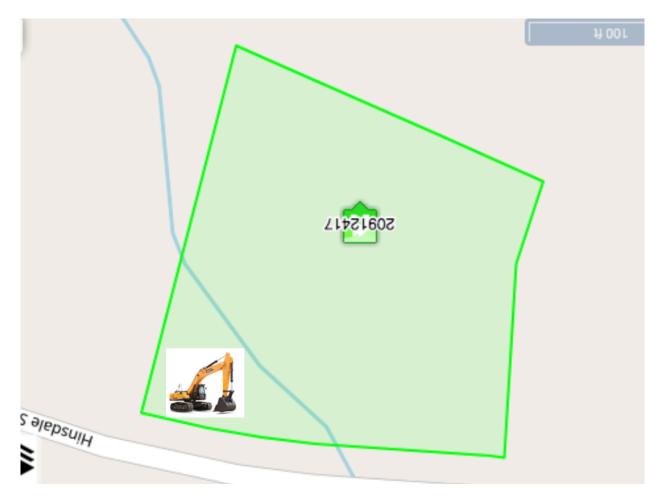
In contravention to Armstrong Glen Engineering's own report and U.S. Army Corps of Engineers, Defendants threaten to construct Hinsdale culvert blind: without <u>any</u> prior soil analysis or Plan B in case there is no bedrock under the existing culvert pipe.

Additionally, U.S. Army Corps of Engineers warned Defendants against blasting bedrock in the stream — with the result that Defendants still threaten bedrock removal, but now refuse to say what non-conventional method they will use. (more about this later in the Letter.)

I sought review of Defendant's project by an independent municipal engineering firm, Diamond Engineering — and received a predictable report: **slope failure will likely result.**



Ensuing erosion is in violation of *Clean Water Act* and *Sediment Pollution Control Act of 1973*.



Importantly, there is no need to grade the steep slope and cause erosion:

An easier access to construction site from left stream bank is on my land, and I am happy to grant access.

Diamond Engineering said so in its report.

I forwarded to Defendants the alternative designs, which are safe, in compliance with Clean Water Act, and cheaper (See Diamond Engineering reports **Attachments 2A and B**)

Construction equipment icon marks part of the land where it is safer to keep equipment and materials and enter the construction zone.

THE ONLY POSSIBLE LOCATION FOR STORING MATERIALS AND EQUIPMENT IS ACROSS THE CREEK FROM YOUR HOUSE

Diamond Engineering



On information and belief, Defendants have not received (and, as far as I know, not applied for) the necessary permits from U.S. Corps of Engineers, NCDEQ-DEMLR, and Clean Water Certification.

City Engineer did, however, convince reluctant Charlotte City Council (in a close 7/5 vote) to approve condemnation of 2813 Hinsdale Street plot, arguing that City must put its faith in the professional Defendants Armstrong Glen, P.C., characterized as "independent consultants." Thus, threatened illegal land-disturbing activity is imminent.

Under Section 505 of the Clean Water Act, and under *North Carolin Sedimentation Pollution Control Act of 1973* \$113A-66, I have standing as a private citizen who suffered "injury in fact" — an invasion of legally-protected interest.¹

This suit is timely because injury does not have to be a fait accompli. A threatened injury is sufficient to confer standing. *Friends of the Earth. Inc. v. Gaston Copper Recycling Corp.*, 204 F. 3d 149, 160 (4th Cir. 2000).

The following applies not just to me but has important implications for all citizens of Charlotte

Although CWA and *North Carolina Sediment Pollution Control Act of 1973* empowers citizen landowners of North Carolina to control erosion of their own land...

Although under the law of our State, unless land-owner **knows** and **consents** in writing to an erosion and sedimentation control plan, nobody can disturb his land. N.C. Gen. Stat. 113A-54.1(a)

City&CMSWS's practice is to take easements on private land first, then decide what to do on the land.

¹ Driscoll v. Adams, 181 F3d 1285 (11th Cir. 1999) (standing under Clean Water Act where stormwater polluted with mud, sand and silt discharged into a stream running to the ponds of plaintiff's property); Sierra Club v. SCM Corp., 580 F. Supp. 862 (1984); Ecological Rights Foundation v. Pacific Lumber Co., 230 F.3d 1141, 1152 (9th Cir. 200). (holding that plaintiff does not have to prove environmental degradation to obtain standing. Damage to individual's aesthetic or recreational interests is sufficient for standing.)

Maybe Defendants will obtains the permits. Maybe not. It is Defendants' practice to shield their land-disturbing activity by layers of secrecy. Without FOIA, I would not even know of U.S. Army Corps of Engineer's objections, nor that the Corps representative walked my land and offered its correction to Defendant's plans.

Last year, representatives of CMSWS falsely represented to me that all CWA permits were already received. They were not then and, to my knowledge, are not now.

This practice of "take easements first, get permits maybe later" should be changed. City&CMSWS should obtain all permits before City takes private land.

To sum up, my requests are:

In the forthcoming Hinsdale-Tinkerbell Project on 2813 Hinsdale Street, Charlotte, North Carolina, 28210,

 all CWA permits must be received before my land is taken, and I retain all owner's rights under N.C. Gen. Stat. 113A-54.1(a) and the Clean Water Act, including being contemporaneously copied on all correspondence that concerns my land

- storm water outfall on left bank be re-alligned to achieve smooth transition from the pipe into the open channel, without sharp angles.
- right bank erosion that already happened be remediated
- culvert wings be lengthened to protect the bank, not cut into steep slope of the bank.
- on right, steep, slope, no grading above the culvert and no grading downstream of the culvert, as set out in the Diamond Engineering letter
- no machinery or equipment stored (or traveling) on the right, steep bank of the creek
- no dynamite blasting or other nonconventional means of cutting bedrock, where the bedrock does not need to be cut, i.e. lay the sewage straight instead of zigzagging the sewage back and forth across the creek under the bedrock

I tried to reason with Defendants. I even retained an independent engineer to set out for them what essentially amounts to application of basic of the engineering principles — like slopes must not be steeper than 2:1, and sewages lines should not zigzag across the water unnecessarily.

Defendants City&Storm say that whatever damage from their violations, "You'll never prove it!"

I am, therefore, forced to bring a lawsuit under Clean Water Act and North Carolina Sediment Pollution Control Act of 1973, as amended.

ATTACHMENTS, DEFINITIONS & EXPLANATIONS:

Attachments 1A and **B** are maps of threatened construction on 2813 Hinsdale Street, Charlotte, North Carolin. Both maps were drawn by CMSWS.

Attachment 1A is the (penultimate)¹ project design provided to me by the Hinsdale-Tinkerbell Project Manager Mr. John Keene, with CMSWS.

Attachment 1B is the project design provided by Daryl Hammock of CMSWS after I complained to the Charlotte City Engineer. CMSWS arbitrarily and capriciously increased grading at least 7 times.

Attachements 2A and **2B** are reports prepared by *Johnny Denton*, P.E., PLS, owner of *Diamond Engineering*, *PLLC*.

Attachment 3. Sewer alignments — red straight line proposed by Diamond Engineering; sig-zags are by Defendants.

Qualifications and Affiliations of the Engineering Firms Mentioned in the Letter

Diamond Engineering PLLC is a consultant I employed to help me understand the CMSWS Project on my land.

Diamond Engineering PLLC serves as the Town Engineer for the Town of Dallas and consults with other municipalities and government agencies.

Mr. Johnny Denton, P.E. and Diamond Engineering PLLC specialize in municipal and civil engineering design, municipal engineering consulting, site design and subdivision planning, water and sewer design, storm water design and

¹ First design included a 12 foot deep sewer manhole cut into steep slope under my house at 24 feet high. SMSWS eventually agreed that this sewer position was unsafe for construction because it exceeded the minimum steepness requirement of the feet horizontal travel per foot vertical rise.) First design had the sewage line cross from left (flatter and lower, opposite to my house) bank, cut through bedrock (which required dynamite blasting) to get to the the manhole on the right bank cliff right under my house foundation, only to then hop back to the left bank of the creek. After consultation with Diamond Engineering, City&Storm presented a second design. The sewage does not cut right under my house. It does hop left-right-left across the creek, but the "hops" are lower downstream, where the terrain is less steep. See **Attachment 3** for sewer odyssey representation.

management, flood studies, erosion control, earthen dam design and breaching, roadway design and also improvements such as sidewalk and curb and gutter, park design and planning, and construction inspection and hydrology flood studies. Serving as a Town Engineer himself, Mr. Denton is more than qualified to offer his opinion on basic mistakes and violations of the plans complained of here and to offer competent redesign options.

Reports of Diamond Engineering provide, *inter alia*, an opinion that construction, as planned by City&Storm, will result in slope failure and erosion.

Diamond Engineering letters also provide direction for sustainable redesigns, which complies with engineering standoffs and practices, State and Federal laws, and cost less.

Armstrong Glen, P.C. are engineers in charge of the Project on the side of City of Charlotte and are named as Defendants

Wildlands Engineering is an engineering firm hired by Defendants to walk the area and describe erosion in the stream, i.e. Channel Stabilization Assessment Report.

"City" means City of Charlotte

"CMCSWS" means Charlotte Mecklenburg County Stormwater Services

"City&Storm" means City of Charlotte and Charlotte Mecklenburg County Stormwater Services

"Project" means *Hinsdale-Tinkerbell Stormwater Drainage Improvement Project* with the drainage area of approximately 240 acres and current estimated cost of construction \$7,900,000 and stated goal of, inter alia, addressing stream erosion.

All discussion, arguments, attachments contained in one subsection of this Notice are incorporate by reference as though restated in all sections of this Notice.

UNPERMITTED DISCHARGE OF DREDGED AND FILL MATERIAL IN WATERS

Discharges of dredged and fill material that are not in compliance with Clean Water Act are prohibited. A discharge of dredged or fill materials into navigable water requires a permit from United States Army Corps of Engineers. FWPCA 404(a), 33 U.S.C. 1311(a).

Compliance with the conditions of the permit are also required. FWPCA 404(p), 33 U.S.C. 1344(p).

The discharge of dredge includes additions to the water "incidental to ... mechanized land clearing ... or other excavation." 33 C.F.R 323.2(d)(1)(iii); see 33 C.F.R. 323.2(d)(2)(1) (including "earth-moving activity.")

"Any discharge of dredged and fill material into the navigable waters incidental to any activity having as its purpose bringing an area of the navigable waters into a use to which it was not perviously subject, shall be required to have a permit under this section." 33 U.S.C. 1344(f)(2). "Navigable," as used in the Act, is of limited import, and ditches, canals, as well as streams and creeks, have been interpreted by the courts as "navigable waters of the United States." In any event, there is no dispute that the unnamed creek at issue is jurisdictional.

Defendants have not applied for or obtained a permit, and their construction design violates Section 404 of Clean Water Act in several respects, at least three of which U.S. Army Corps of Engineers already pointed out to Defendants in preliminary review. Defendants ignore U.S. Army Corps of Engineer's warnings and persist in their illegal design.²

I. <u>Land disturbing activity on steep slope violates CWA 404</u>

² I understand that Defendants might argue that they will proceed under Regional General Permit. However, the threatened design violates conditions of the permit, and the U.S. Army Corps of Engineers already warned Defendants, as described in this letter. Also, based on intra-office correspondence, Defendants recognize that Nationwide Permit may be necessary based on the size of the project, and, based on the individual challenges involved in Hinsdale Culvert specifically, it may even need an individual permit.

Right bank of the unnamed creek as it runs through the subject plot 2813 Hinsdale Street, is tall, steep, and very eroded. Defendants threaten unpermitted land disturbance of this steep slope — complete land clearing (removing trees, shrubs, vegetation cover) by mechanized excavation activities, extensive grading, permanent change of bank contours, destabilizing stream bank with heavy mechanized equipment and machinery, on the strip over 20 feet high along the creek bank within a few feet from the house foundation, — plus, dynamite blasting in the stream.

I request that Defendants refrain from disturbing the steep slope located above and beyond the Hinsdale culvert, because this grading is not only unpermitted and, therefor, illegal, but also arbitrary and capricious: the grading is totally unrelated to the purported reconstruction of Hinsdale culvert.

Defendants' project plans a change to bank contours and discharge of dredged and fill material into the navigable waters. That is in violation of Section 404 of Clean Water Act.

The steep slope in question reaches over 20 feet (depending on the part of the slope.) Effective slope rate is 1.5:1, but some parts are vertical.

Diamond Engineering PLLC concluded that "the steepness of this slope makes any construction in this area... subject to erosion and slope failure... the probability of soil settlement either during or after construction is significant." **Attachment 2A**

Diamond Engineering explained that basic engineering principles (which are, incidentally, incorporated into all permit requirements) do not allow grading this slope.

Diamond Engineering wrote that while the subject the slope is 1.5:1, "[a] maintainable maximum slope for soils in the piedmont of North Carolina is 2:1. Slopes steeper that 2:1 are subject to slope failure and erosion due to inability to obtaining and maintain an adequate ground cover."

Diamond Engineering concluded that subject slope is "unstable;" that "grading in this area will destroy the existing stable vegetation and structure;" and that storing heavy machinery on the slope, as per Defendants' plan, is not an option. But Defendants are welcome to store on the left bank of the creek, which is also my land.

Bank erosion, slope failure, inability to obtain vegetative cover will result from Defendants' threatened unpremitted land disturbing activity and will necessarily result in discharges of dredged and fill material, — all in in violation of sections 301 and 404 of the Clean Water Act without permit **or in violation of permit**.

Threatened land-disturbing activity is arbitrary, capricious, **and retaliatory**, because CMSWS purposefully increased land-grading area which will destroy the counters of the slope and vegetative cover at least seven times after I went over the head of Stormwater Project Manager and complained to the Charlotte City Engineer. Additional grading is right under the house foundation and along the creak.

The insert here shows a close-up of grading threatened by CMSWS in early 2019, as compared to the increased grading after I complaint to City Engineer in late 2019. In retaliation for my complaint, the area to be graded is increased at least 7 times.

Note that *Department of the Army Regional General Permit* specifically commands: "Tree and shrub cover along the stream should be retained as much as possible in order to stabilize the stream banks."³

Also, U.S. Army Corps of Engineers warns that the their permit "does not authorize injury to the property or rights of others." The proposed plan, and especially the retaliatory additional grading clearly show intent to cause injury to house foundation.

II. <u>Unnecessary dynamite blasting of bedrock in the stream violates CWA 404.</u> <u>US Army Corps of Engineers, acting in preliminary review of the project, warned against unjustified blasting.</u> I provided a safer, cheaper design that does not call for dynamite blasting.

³ Department of the Army Regional General Permit para (p) at 5.

⁴ Department of the Army Regional General Permit para (j) at 7.

Defendants want to zig-zag sewage from one side of the creek and back, and plan bedrock removal for this unnecessary and disruptive purpose.

In 2019, the U.S. Army Corps of Engineers became aware of the unnecessary bedrock removal and threatened dynamite blasting of <u>bedrock</u> in the creek. The U.S. Army Corps of Engineers therefore emailed to warn City&Storm that unjustified blasting would not receive the 404 permit. U.S. Army Corps of Engineers further warned City&Storm that "blasting has potential issues, including fracking and loss of stream flow." It then requested assurances that City&Storm would receive proper permits.

After several month of insisting on blasting, Defendants now claims that it will not blast, but will, instead, cut through bedrock using undisclosed methods. The City Engineer stated that he "do[es] not want to guess" how the contractor will do it.

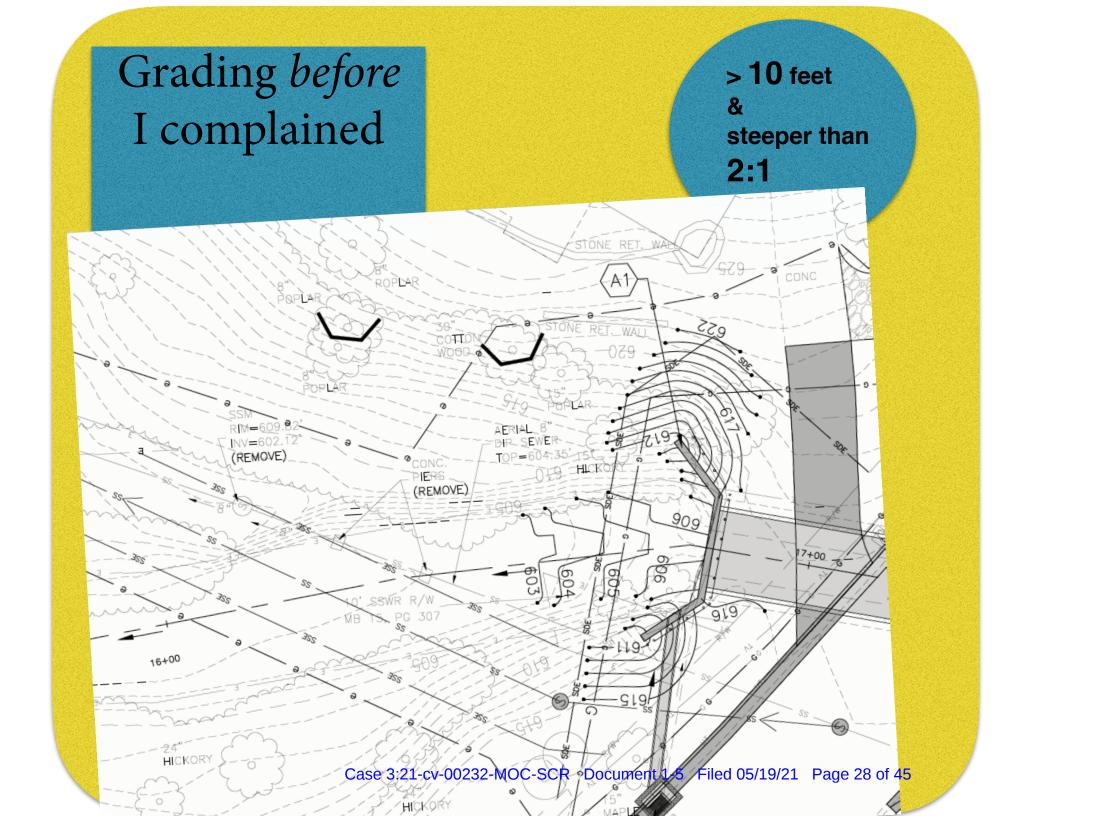
Meanwhile, Diamond Engineering warned that this unnecessary bedrock removal contemplated by Defendants will "require" some sort of "disruptive nonconventional construction method."

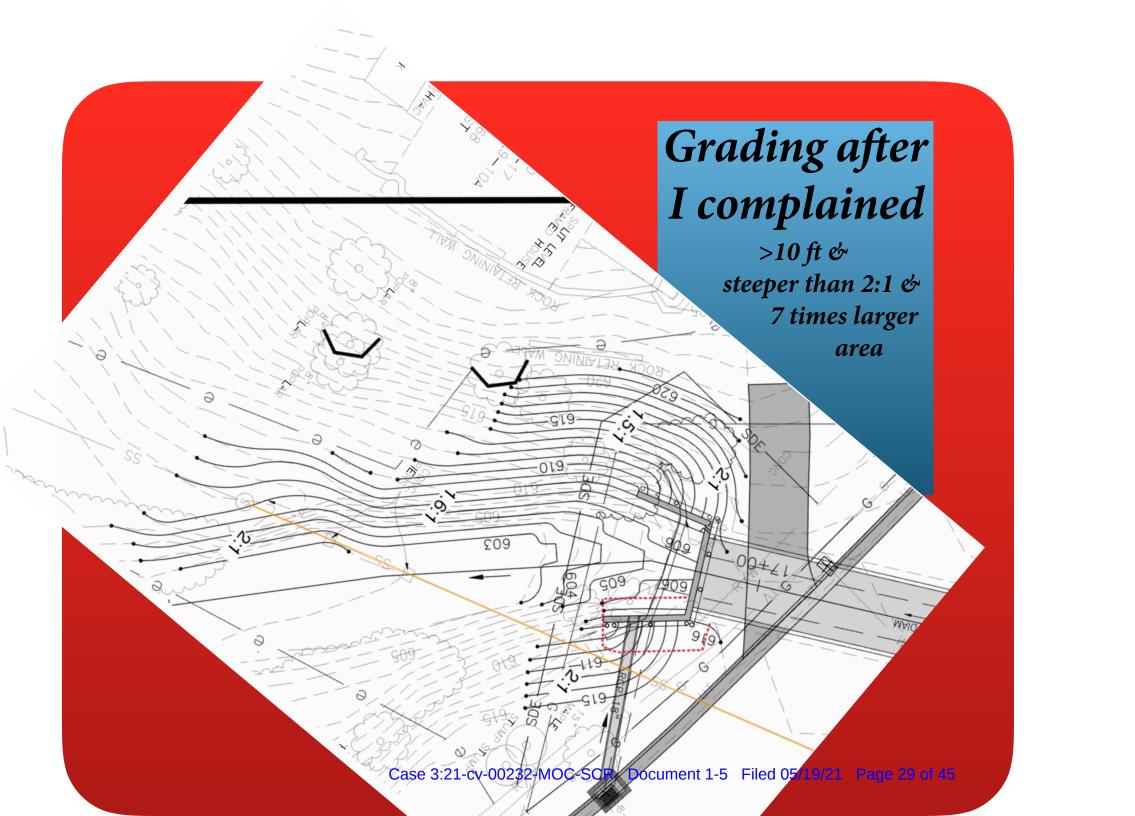
The critical point here is that there is no justification for the sewage pipe zigzagging, and therefore, no justification for bedrock destruction.

Sewage pipe originates and end on the left bank, and must straight down the left bank. This simple and cost-efficient design has been prepared at my expense in 2018 and presented to Defendants by Diamond Engineering, a respectable engineering firm that serves as Town Engineer for the Town of Dallas itself. Mr. Denton of Diamond Engineering has extensive experience and engineering expertise in municipal, hydrological, water and sewer design, storm water design and management, flood studies, erosion control. **See Attachment 2A and 3**.

Defendants rejected the cheaper, safer, professional design that satisfies Clean Water Act, and continue with their disruptive and unsafe designs that violate the Act by unnecessary destruction of bedrock and increasing sewage contact with water.

I request that Defendants desist and lay the sewage pipe straight, or at least lay it straight far enough downstream where bedrock ends and no blasting or other bedrock destruction is required. Mostly, this can be done on my land.





III. Existing Stormwater pipe outfall is directed at 90 degrees at the opposite bank. This has already caused "severe" erosion and bank undercutting. Defendants have been already warned by US Army Corps of Engineers that this is a design defect. Defendants threaten to replicate the same defect in the new culvert they plan to build.

Presently, downstream of Hinsdale culvert, a stormwater pipe drain discharges at nearly 90 degrees to the opposite (right) bank, the bank where my house sits. This has caused and continues to cause erosion, sedimentation, and bank undercutting.

In 2019, I made U.S. Army Corps of Engineers aware of this design defect.

The Corps agreed it was a problem, and contacted CMSWS, to warn that redesign was warranted. Outfall, — warned the Corps, must "not come in a 90 degree angle to reduce potential erosion on the opposite bank."

Nor can stormwater fall "perpendicular to the stream." US Army Corps of Engineers advised Defendants to "consider potential impact of directing storm flow across the stream."

In response, CMSWS falsely represented to the U.S. Army Corps of Engineers that their planned new construction would correct this violation.

However, CMSWS's intra-office emails (which I received by FOIA request) revealed the falsehood: the very same morning (May 23, 2019) when CMSWS promised to the U.S. Army to redesign, so that the outfall does not cut the opposite bank, they promptly agreed between themselves to ignore the U.S. Corps's recommendation. Among the reasons was unwillingness to "redesign again."

U.S. Army Corps of Engineers, on its part, was not looped in at least as late as June 13, 2019, as is evidenced by its assurance in an email to me: "I asked if [City] would be able to change the angle of the storm water pipe so that it is not at a 90 degree angle to the stream which should help directly storm flow downstream and away from the opposite bank. ...once the plans come if with the permit request we can review those to see if this revision has been made, and if not follow up with the City at that time."

Speaking at the City Council, City Engineer revealed that Defendants continue to insist on replicating the illegal design, apparently because they think it's not worth the money to design properly. Currently, the existing stormwater outfall continues undercutting the steep slope, in continuing violation of the Acts, and the design for the new outfall remains uncorrected, in threatened violation of the Acts.

In sum, Defendants conspired to replicate the existing violation even despite clear instruction from U.S. Army Corps of Engineers.

The continued erosion and bank undercutting has resulted and will continue to result in unpermitted discharge of dredged and fill materials, including sand, silt, dirt, debris, and sedimentation, all in violation of Section 404 of the Clean Water Act and of North Carolina law.

IV. <u>Threatened "Blind" Culvert Construction is Unpermitted and Violates</u> Conditions of the Permit

As already explained, Defendants plan to rip out the existing Hinsdale culvert, an 84 inches round pipe with wing walls, and put in a "bottomless" 12 by 7 feet culvert. In doing so, Defendants are hoping that the bottom of the creek is fully stabilized by bedrock. But they do not actually know what's *under* the existing culvert and flume because they purposefully decided not to find out.

Clean Water Act does not allow bottomless culverts unless there's bedrock. Is there bedrock under the existing culvert? Nobody knows. Indeed, Defendants ArmstrongGlen, P.C. reported to Defendants City&Storm and warned them that at Hinsdale culvert, geotechnical investigation is <u>required</u>, i.e. boring at each end of culvert, is necessary to design wing wall and footings of headwall.

After that, all Defendants conspired to proceed in violation.

Perhaps significantly, Hinsdale culvert was specifically singled out for this "blind construction." At every other culvert of the Hinsdale-Tinkerbell multi-culvert Project, the necessary soil tests were performed. Indeed, SMSWS even (unsuccessfully) pressed me to perform soil tests in my back yard on land outside the are that has anything to do with the culvert. Still, it refuses to do the necessary soil study under the existing culvert.

Defendants are well aware that their plan to build blind did not sit well with the U.S. Army Corps of Engineers.

In September of 2018, the U.S. Army Corps of Engineers conducted its preapplication field review. At the conclusion of review, the U.S. Corps of Engineers became concerned: *what if there is no bedrock underneath?* (Note that, per 404 permits, culverts must ordinarily be buried to minimize destabilization.)

U.S. Army Corps of Engineers marked in her hand-written notes:

"...recommended stabilization measures if they pulled out culvert and fume and no bedrock. **Would probably require modification in that case**." (my emphasis)

U.S. Army Corps of Engineers then asked Defendants to come up with "Plan B," in case there is no bedrock underneath — a request which Defendants ignored.

In addition to the soil tests, the wide-winged shape of culvert is an issue on this steep slope.

CWA Section 404 Permits makes very specific requirements of the shape, position, stabilization measures of the culverts, — depending on the stream.

Three-sided culverts (as proposed by Defendant) are only allowed if they can not be buried.

Culverts width must be "comparable to the width of the stream channel," and not wider to prevent land-disturbance in violation of Section 404 of the Clean Water Act.

Culvert designed by Defendants is significantly wider than the stream. Original design contemplated wide wing wall that cut far into the bank in violation of conditions of the permit, and would cause destabilization and disturbance of stream bank. A redesign of culvert wing wall to run along the stream, instead of cutting into the slope was prepared at my expense by Diamond Engineering. See **Attachment 2B**.

Astonishingly, even though Defendants agreed to turn the wall to run along the stream, they nevertheless insist on cutting, destabilizing, and disturbing the bank even higher and wider than in the original plan.

I request that culvert reconstruction complies with the provisions of Clean Water Act, that necessary soil samples be analyzed before construction starts, that plan and plan contingencies requested by the U.S. Army Corps of Engineers be properly submitted for permitting process and that Defendants desists from "just winging it" with Hinsdale culvert, in violation of Clean Water Act 404.

I also request that culvert be designed in such a manner so to stabilize the highly eroded slope of the creek along the stream. Faulty stormwater outlet eroded the bank, and I request remediation.

UNPERMITTED DISCHARGE OF STORMWATER AND POLLUTANTS AND DISCHARGE IN VIOLATION OF THE PERMIT

Sections 301 and 402 of the Clean Water Act prohibits discharge of pollutants, without a NPDES permit. 33 U.S.C. §1311, 1342(p)⁵. "Discharge of pollutants" means, inter alia, "any addition of pollutant to navigable waters from any point source." 33 U.S.C. §1362(12).

Stormwater is a pollutant (or contains pollutants) within the meaning of the Act. "When rain water flows from a site where land disturbing activities have been conducted, such a grading and clearing, this water is a pollutant under the CWA" *North Carolina Shellfish Growers v. Holly Ridge Assocs.*, LLC, 278 F. Supp 654, 678 (E.D.N.C. 2003) Sediment, which is primarily composed of sand and dirt, is a pollutant with the meaning of Clean Water Act. See *Driscoll v. Adams*, 181 F.3d 1285, 1291 (11the Cir. 1999) (sand, silt, mud in stormwater are pollutants.)

As a corollary, an NPDES permit is required for stormwater discharges associated with construction activities, including clearing, grading, and excavation which are, as here, part of a larger common plan.⁶ On the subject tract, which is part of a 240 acre common plan and development, Defendants threatens discharge of storm

⁵ The National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Program is mandated under the federal Clean Water Act. In North Carolina, the EPA has delegated MS4 Program oversight to the Department of Environmental Quality (DEQ), Division of Energy, Mineral, and Land Resources.

⁶ See 40 C.F.R. 122.26(b)(14)(x) and (15)(i).

water without NPDES permits, in violation of Clean Water Act, and discharges storm water in violation of Clean Water Act.

<u>Defendants are threatening to violate the Act by grading without NPDES Permit, in violation of Discharge Permit conditions and in violation of North Carolina Sedimentation Pollution Control Act of 1973, as amended</u>

For City Municipal Projects, enforcement and permitting of the Clean Water Act (including the implementation of Construction Site Stormwater Runoff Control Project), lies directly with the State.

Thus, Defendants are prohibited from construction without obtaining 402 permit from North Carolina Department of Environmental Quality, Division of Energy, Mineral and Land Resources (NCDEQ-DEMLR).⁷

Defendants have not applied to NCDEQ-DEMLR for a Permit to Conduct Land Disturbing Activities, a.k.a. grading plan.

Not only Defendants are threatening to grade without a permit, but their threatened grading project (**Attachments 1A or 1B**) is in violation of the Clean Water Act and contrary to the Best Management Practices (BMPs) mandated by a Discharge Permit⁸ for land-disturbing activity, as well as in violation of North Carolina Sedimentation and Pollution Control Act of 1973 and City Ordinances.

Current Discharge Permit is issued October 10, 2018, expires October 9, 2023.

Discharge Permit NCS000240, contains applicable requirements and hurdles for "land-disturbing activities," i.e. grading, which are in the Permit itself and in the laws incorporated by reference: Clean *Water Act, the Sedimentation Pollution Control Act of 1973, Chapter 4 of Title 15 of the North Carolina Administrative* Code and *Clean Water Act, and all the Federal Law including but not limited to Clean Water Act.* Noncompliance with the conditions of the Discharge Permit constitutes a violation of Clean Water Act. (Discharge Permit at 27)

⁷ See Discharge Permit Section E(2.)(d) at Part II, page 5; City of Charlotte NPDES MS4 Permit Renewal Application and Stormwater Management Program Report. Permit NCS000240 August 2017. Section 6 at 20, Section 7.4.5 at 39.

⁸ Under the authority of the Federal Clean Water Act, State of North Carolina Department of Environmental Quality Division of Energy, Mineral, and Land Resources, issued to the City of Charlotte Discharge Permit NCS000240, ("Discharge Permit.")

While all large area grading is strictly regulated by Section 402 of the CleanWater Act, steep slope disturbances especially must be "minimized." 40 CFR 450.21(a)(4) (Effluent Limitations reflecting the best practicable technology currently available.)

Grading on the subject slope violates Clean Water Act and *North Carolina Sedimentation Pollution Control Act of 1973* because, among other things, it exceeds the allowable parameters — <u>both</u> in steepness (angle) and its hight.

Maximum steepness for "[a]ll graded creek banks and slopes shall be at a maximum of two (2) feet horizontal to one (1) foot vertical (2:1) <u>and</u> not to exceed 10 feet without terracing..."9

In contrast, Defendants threaten to unnecessarily grade the slope steeper (1.5 to 1 instead of 2:1) and taller (over 20 feet instead of prescribed maximum of 10) — this is undisputed.

Johnny Denton, P.E. of Diamond Engineering reviewed threatened grading and concluded that "grading in this area will destroy the existing stable vegetation and structure," the slope is "subject to slope failure and erosion due to the inability to obtaining and maintaining an adequate vegetative cover." (Attachments 2A and B)

Consequently, the threatened grading violates Discharge Permit's mandate that "[t]he angle for graded slopes ... shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion-control devices or structures." N.C. Gen. Stat. § 113A-57(2)¹⁰; *Code of Ordinances, City of Charlotte*, Section 17-33

Nor does Defendant's current grading design provide **any buffer** along the creek, as mandated by N.C. Gen. State § 113A-57(1).

Critically, the destruction contemplated by Defendants is senseless. At this point in construction redesign, they no longer plan to stick sewage pipe into the slope, as

⁹ Charlotte Land Development Standards Manual, Charlotte Engineering and Property Management, Revision 18, January 31st. 2019 II(A)(10) instructs:

¹⁰ Discharge Permit requirements incorporate by reference North Carolina *Sedimentation Pollution Control Act of 1973 and City of Charlotte Soil Erosion and Sedimentation Control Ordinance* Thus, non-compliance with the Sedimentation Pollution Act and the City Ordinance results in violation of the permit and, consequently, violation of Section 402 of Clean Water Act.

they threatened at first. Nor do they plan to cut wing wall deep and high into the slope as they insisted next. At this point, Defendants ran out of all excuses, however absurd, for their urge to destroy this slope far and away from the construction area. At his point, Defendants are just threatening to grade land that has nothing to do with their construction.

Without control measures, the threatened grading will cause erosion and, as a result, ongoing discharge of pollutants, including sediment, sand, rock, dirt, eroded soil, debris, pollutant laden storm water and other substances into the waters of United States.

I, therefore, request that Defendants desist from this unsafe, illegal and utterly pointless grading.

In accordance with the requirements of the establishing Section 402(p)(3)(B)(iii), Discharge Permit requires "controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods…" As shown above, Defendants' plan violates this requirement of the permit.

Existing and threatened Stormwater stormwater outfall is directed at 90 degrees at the opposite bank and has already caused erosion and bank undercutting in violation of State law and the Clean Water Act. U.S.

Army Corps of Engineers warned City&Storm against this design

Storm water outlet is a "point of discharge" and it is illegal to operate it without a a NPDES permit. Clean Water Act 301, 402. "Every point source discharge is prohibited unless covered by a permit, which directly subjects the discharger to the administrative apparatus established by the Congress to achieve its goals."

Storm water outlet design is faulty: it has eroded the opposite bank and deposits solids in surface waters. U.S. Army Corps of Engineers already warned City&Storm against replicating this faulty design as violating CWA 404. It also is in violation of CWA, and I request that this design be remediated and not replicated in the new construction.

III. Violation of water quality standards

Section 401 of the CWA requires a certification by the State in which a discharge originates that the construction or operation of facilities, which may result in any discharge into the navigable waters, comply with state water standards. 33 U.S.C. \$1341(a). Under North Carolina law, a permit is required to "cause or permit any waste, directly or indirectly, to be discharged to or in any manner intermixed with waters of the State in violation of the water quality standards applicable to the assigned classification..." N.C. Gen. Stat. \$143-215.1(a)(6)

On information and belief, Defendants neither applied for, nor received any Certifications and threaten to proceed to construction without permit or in violation of the permit. At a minimum, 4147 Certification is required, if operating under Regional General Permit No. 2016-00163 (RGP 163), "CSWS Stormwater Projects."

Excavation, land clearing, disturbing vegetation, eroding steep slope, relocation and redeposit of dredged and fill material, grading without a buffer, position of the outfall that continuously erodes the bank and sends sedimentation into the stream is in violation of Clean Water Act, including water quality standards.

The last condition mentioned — directing storm water source at ninety degree angle to the opposite creek bank and eroding soil and sand has resulted and will continue to result in sediment in the water. This condition remains unremediated.

Unstabilized, oversized culvert and unjustified blasting or like unconventional method of removing bedrock, threatened by Defendant's current plan, likewise, is not only without certification but in violation of certification standards.

With respect to the subject plot,

I request that Defendants cease and desist from all activities that result in discharge of dredged and or fill material or pollutants into surface waters without permits, and in violation of the permits:

from illegal land-clearing and grading, blasting, destroying steep slope by heavy equipment, and from. Please consult Attachment 1 A and B.

from illegal culvert construction

from illegal stormwater discharge that erodes the bank and causes erosion

from land-disturbing activities without approved erosion and sedimentation control plan and/or in violation of such.

I further request that Defendants correct ongoing violations of the Clean Water Act which have resulted from unpermitted discharge of stormwater and pollutants and the violation of water quality standards.

please consult pages XV-XVI of Executive Summary, above and maps in Attachment 1A&B for the particulars.

The stated purpose of Hinsdale-Tinkerbell project is, inter alia, to **address stream erosion**. I request that Defendants do just that — remedy the existing violation, ameliorate the slope failures, and redesign their construction plan so it comports its the Acts.

In accordance with the Clean Water Act, § 33 U.S.C. 1365(b)(1)(A), 40 C.F.R. § § 135.1-135.3 and *Sedimentation Pollution Control Act of 1973*, this letter serves to notify you that I intend to file suit in federal district court to enjoin the threatened violations and correct ongoing violations described above, to ensure compliance with federal and state law, to obtain civil penalties, recover attorney fees and costs of litigation, and obtain other appropriate relief. If you would like to discuss the issues identified in this letter, correct any facts stated in this letter which you deem inaccurate, or offer a proposal for resolving these issues, please contact me.

Very truly yours,

Dr. Nonka Avlward

Notice of Intent to Commence Civil Action 18

Letter 18 of 20

BY CERTIFIED MAIL on or about December 3, 2019:

City of Charlotte
Marcus D. Jones,
City Manager
Office of the City Manager
600 East 4th Street,
Charlotte, N.C 28202

City of Charlotte
Vi Lyles,
City Mayor
600 East 4th Street,
Charlotte, N.C. 82202

Michael Davis, City Engineer 600 East 4th Street, Charlotte, N.C. 28202

Charlotte Stormwater Services
Kruti Desai, PE,
Program Administrator,
Division Manager,
City of Charlotte
600 East Fourth Street,
Charlotte, N.C. 28202

Mecklenburg County Stormwater Services Dave Canaan, Storm Water Services Director 2145 Suttle Avenue Charlotte, N.C. 28208

Andrew R. Wheeler, Administrator, U.S. Environmental Protection Agency USEPA Headquarters William Jefferson Clinton Building 1200 Pennsylvania Avenue, N.W. Mail Code 1101A Washington, DC 20460 Mary Walker, Regional Administrator, Region IV, 61 Forsyth Street, S.W. Mail Code 9T25 Atlanta, GA 30303-9860 Michael S. Regan, Secretary North Carolina Department of Environmental Quality 217 West Jones Street Raleigh, NC 27603 Linda Culpepper, Water Resources Director, North Carolina Department of Environmental Quality 217 West Jones Street Raleigh, NC 27603 Zahid Khan North Carolina Department of Environmental Quality Mooresville Regional Office 610 East Center Avenue, Suite 301 Mooresville, N.C. 28115

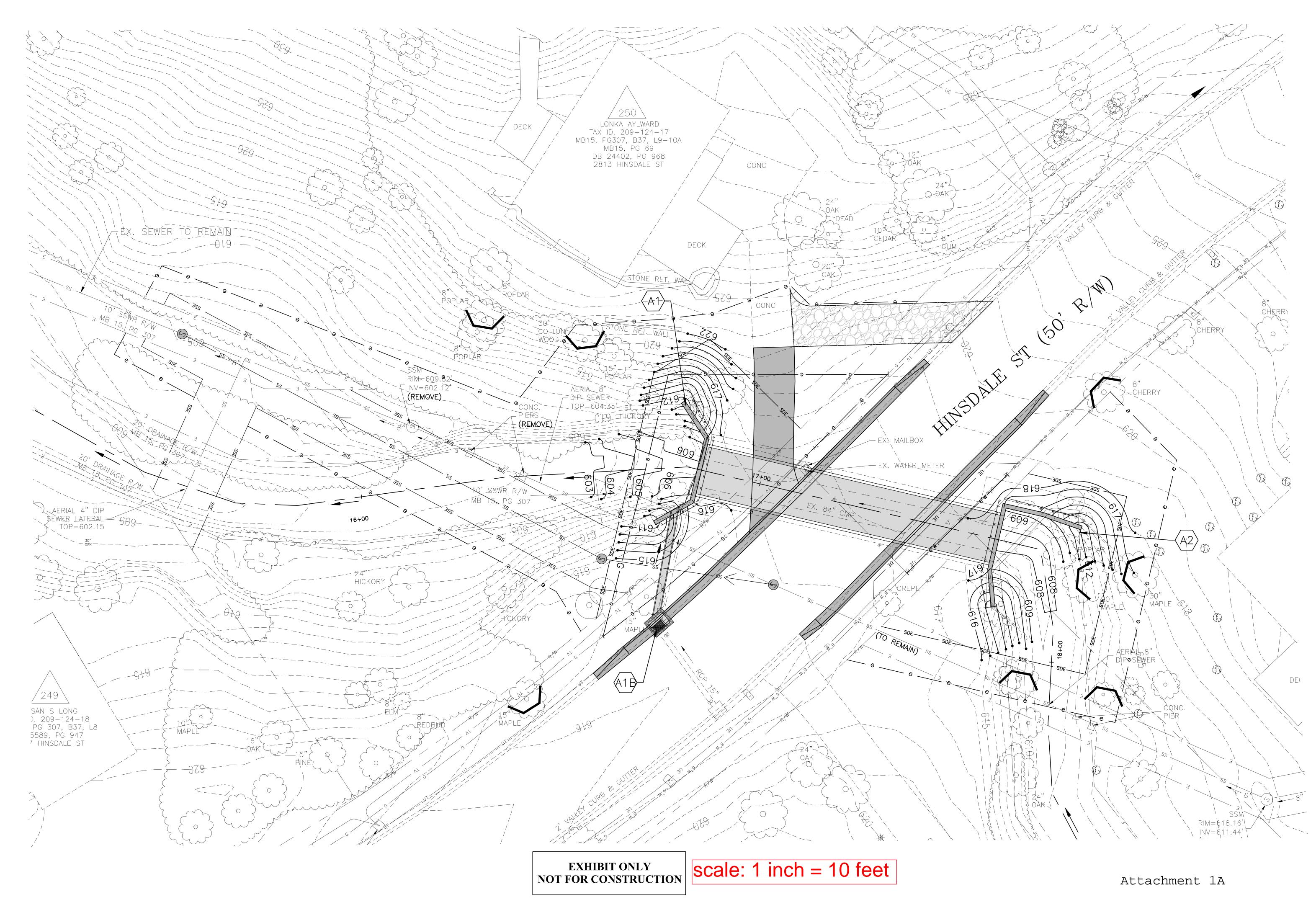
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Attorney General,
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cc: (by first class mail)

Alan Johnson Senior environmental Specialist NC Dept. of Environment & Natural Resources (NCDENR) Division of Water Resources - Water Quality Regional Operations 610 East Center Ave., Suite 301, Mooresville, North Carolina 28115 Bryan K. Roden
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WRRI Director
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Patrick Baker, Esq. City Attorney 600 East 4th Street Charlotte, North Carolina 28202







December 6, 2018

Ilonka Avlward 2813 Hinsdale St. Charlotte, NC 28210

Subject: Evaluation of Potential Impact to 2813 Hinsdale St. by a Proposed Charlotte Mecklenburg Storm Water Drainage Improvements Project

Dear Dr. Aylward,

This correspondence is to document the findings of a field inspection and evaluation of the impact of a proposed stormwater improvements project at your residential property at the above referenced address. After a review of the plans and an evaluation of the site conditions, I offer the following opinion. The plan, as it is currently proposed, poses substantial risk to the structural integrity of your residence, both during construction and in later years. Sewer manhole #2 on sheet U1, which is the closest to your residence, will be approximately 12' deep and will be constructed on a 24' high slope that exceeding 2:1 in slope. A 2:1 slope (a slope that drops 1' within 2' of travel) is the maximum slope that is typically considered stable. The steepness of this slope makes any construction in this area difficult, expensive, and subject to erosion and slope failure. This proposed manhole is within 24' of the corner of your foundation which is 12' above the proposed manhole location. Considering all these factors, the probability of soil settlement either during or after construction is significant.

Along with improving stream hydraulics, Charlotte-Mecklenburg Storm Water Services is attempting to better safeguard their sewer collection system by lowering the lines at the creek crossings below the creek bottom. This will require rock removal using either blasting or another nonconventional construction method which will also increases the probability of damaging your residence.

I offer the following recommendation which will eliminate the possibility of damaging your residence and in my opinion reduce construction cost associated of the sewer line construction. The sewer line currently zig-zags back and forth and crosses the creek in two locations (sheet U-1 and sheet U-6). Charlotte-Mecklenburg Storm Water Services should relay the sewer line on the northeast side of the creek from sheet U-6 up to and into the proposed manhole 4 on sheet U-1. The topography along the northeast side of the creek is flatter and lower and will allow for easer construction and reduced construction cost. This will eliminate both unnecessary creek crossings, secure the lines from potential washout or damage from floating debris, reduce construction cost, and eliminate the potential damage to your residence.

If you should have any questions, please contact me at (704) 922-0024.

Johnny H. Denton, PE, PLS

Diamond Engineering, PLLC

Civil Engineering & Surveying Site & Subdivision Planning Erosion & Storm Water Control Water & Sewer Design Municipal Engineering

440 Old NC 277 Loop Road

Dallas, N.C. 28034

Phone: (704) 922-0024



June 17, 2019

Ilonka Aylward 2813 Hinsdale St. Charlotte, NC 28210

Subject: Evaluation of Potential Impact to 2813 Hinsdale St. by a Proposed Charlotte Mecklenburg Storm Water Drainage Improvements Project

Dear Dr. Aylward,

This correspondence is to document the findings of a review of the proposed plans to replace the storm drainage culvert on Hinsdale Street, adjacent to your property. I have reviewed, in particular, the slope at the southwest corner of the culvert. The slope closest to your residence, is proposed to be 1.5-1. The Slopes at all the other corners of the culvert is proposed to be 2:1. A typical and maintainable maximum slope for soils in the piedmont of North Carolina is 2:1. Slopes steeper than 2:1 are subject to slope failure and erosion due to the inability to obtaining and maintain an adequate vegetative cover. This proposed unstable slope is uncomfortable close to your residence and it is my recommendation that a redesign in this area is warranted. Grading in this area will destroy the existing stable vegetation and structures and will subject the house foundation to blasting and vibration from moving construction equipment.

My recommendation is that the end of the wing wall be rotated toward the creek and away from your residence. This would reduce the cut, reduce the slope, and eliminate the risk to your residence. Because the creek is bending to the left in this location, angling the wingwall away from your residence will also protect the creek bank in this area. This proposed change shouldn't cost any additional money to construct and can be constructed below the 616 contour which will limit the danger to your house and reduce the city's easement cost.

You also indicated that the city contractor is planning on storing materials and equipment on your property during construction. The only possible location for this would be across the creek from your house on the triangular lot of your property bounded by the creek, the road, and your eastern property line. Using this area wouldn't cause a significant disruption to your residence or disturb an area that might erode and cause structural damage to your house. Please review my comments and let me know if you have any additional questions.

If you should have any questions, please contact me at (704) 922-0024.

Johnny H. Denton, PE, PLS Diamond Engineering, PLLC



Civil Engineering & Surveying Site & Subdivision Planning Erosion & Storm Water Control Water & Sewer Design Municipal Engineering

440 Old NC 277 Loop Road

Dallas, N.C. 28034

Phone: (704) 922-0024

Exhibit Only - Not for Construction

scale: 1 inch = 20 feet

